

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-30 (cancelled)

31. (new) A semiconductor device comprising a resistive element, wherein the resistive element comprises: a bottom metal layer; an insulating barrier layer positioned over the bottom metal layer; and a non-magnetic metal layer positioned over and in direct contact with the insulating barrier layer.

32. (new) The semiconductor device of claim 31, wherein the resistive element further comprises protective cap layer positioned over the non-magnetic metal layer.

33. The semiconductor device of claim 31 wherein the barrier layer is less than approximately two nanometers in thickness.

34. (new) The semiconductor device of claim 31 wherein the barrier layer has been at least partially oxidized.

35. (new) The semiconductor device of claim 31 wherein the resistive element comprises a smoothing layer of Ta positioned over said base layer.

36. (new) The semiconductor device of claim 31 wherein the base layer further comprises TaN.

37. The semiconductor device of claim 31 wherein the resistive element comprises a seed layer comprising CoFe.
38. (new) The semiconductor device of claim 31 wherein the resistive element comprises a smoothing layer of Ta upon which the barrier layer is deposited.
39. (new) The semiconductor device of claim 31 wherein the resistive element comprises a bottom electrode comprising TaN.
40. (new) The semiconductor device of claim 31 wherein the resistive element comprises a bottom electrode comprising TaN.
41. (new) The semiconductor device of claim 31 wherein the resistive element comprises a top electrode further comprising at least one of Al and TaN.
42. (new) The semiconductor device of claim 32, wherein the protective cap layer comprises TaN.